

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2002-CE-53-AD; Amendment 39-13176; AD 2003-11-17]**

**RIN 2120-AA64**

### **Airworthiness Directives; Pilatus Aircraft Ltd. Models PC-12 and PC-12/45 Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

---

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that applies to certain Pilatus Aircraft Ltd. (Pilatus) Models PC-12 and PC-12/45 airplanes. This AD requires you to inspect the front and rear surfaces of the pressure dome for damage and cracks, and, if necessary, accomplish repairs. This AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Switzerland. The actions specified by this AD are intended to detect and correct damage and cracks to the pressure dome, which could lead to rapid decompression.

**DATES:** This AD becomes effective on July 28, 2003.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of July 28, 2003.

**ADDRESSES:** You may get the service information referenced in this AD from Pilatus Aircraft Ltd., Customer Liaison Manager, CH-6371 Stans, Switzerland; telephone: +41 41 619 63 19; facsimile: +41 41 619 6224; or from Pilatus Business Aircraft Ltd., Product Support Department, 11755 Airport Way, Broomfield, Colorado 80021; telephone: (303) 465-9099; facsimile: (303) 465-6040. You may view this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2002-CE-53-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

#### *What Events Have Caused This AD?*

The Federal Office for Civil Aviation (FOCA), which is the airworthiness authority for Switzerland, recently notified FAA that an unsafe condition may exist on certain Pilatus Models PC-12 and PC-12/45 airplanes. The FOCA reports that drill and/or rivet tool damage could have occurred in areas around the edges of the rear pressure dome during assembly of the Models PC-12 and PC-12/45 airplanes.

Pilatus has received 19 reports of damaged pressure domes. The reported damage included nicks and scratches. This type of damage could also occur on the forward surface of the pressure dome.

#### *Has FAA Taken Any Action to This Point?*

We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain Pilatus Models PC-12 and PC-12/45 airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on January 14, 2003 (68 FR 1802). The NPRM proposed to require you to inspect the front and rear surfaces of the pressure dome for damage and cracks, and, if necessary, accomplish repairs.

#### *What Is the Potential Impact if FAA Took No Action?*

The damage to the pressure dome could result in cracks in the pressure dome and lead to rapid decompression.

#### *Was the Public Invited To Comment?*

The FAA encouraged interested persons to participate in the making of this amendment. The following presents the comment received on the proposal and FAA's response to the comment:

### **Comment Issue: How To Obtain a Repair Scheme Is Unclear**

#### *What Is the Commenter's Concern?*

The commenter states that the current wording in the proposed AD is incorrect and implies that the repair scheme will come from FAA. Additionally, the commenter states that the repair scheme will come from the manufacturer; FAA will provide approval of the repair.

#### *What Is FAA's Response to the Concern?*

We do not concur that the current wording of the proposed AD is incorrect. Since the service information, which is referenced in the proposed AD, does not address repairs for this type of damage, FAA has to individually approve each repair as needed. This gives the manufacturer the option to develop other generic repair procedures, which were not developed at the time of the NPRM, for this type of damage and submit them to FAA for approval. Therefore, we have not changed the final rule AD based on this comment.

## FAA's Determination

### *What Is FAA's Final Determination on This Issue?*

We carefully reviewed all available information related to the subject presented above and determined that air safety and the public interest require the adoption of the rule as proposed except for the changes discussed above and minor editorial questions. We have determined that these changes and minor corrections:

- Provide the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

## Cost Impact

### *How Many Airplanes Does This AD Impact?*

We estimate that this AD affects 280 airplanes in the U.S. registry.

### *What Is the Cost Impact of This AD on Owners/Operators of the Affected Airplanes?*

We estimate the following costs to accomplish the inspection:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
8 workhours x \$60 per hour = \$480	No parts required	\$480	\$480 x 280 = \$134,400.

We estimate the following costs to accomplish any necessary repairs that would be required based on the results of the inspection. We have no way of determining the number of airplanes that may need such repair:

Labor cost	Parts cost	Total cost per airplane
16 workhours x \$60 per hour = \$960	No parts required	\$960.

## Compliance Time of This AD

### *What Will Be the Compliance Time of This AD?*

The compliance time of this AD is within 90 days after the effective date of this AD, unless already accomplished.

### *Why Is the Compliance Time Presented in Calendar Time Instead of Hours Time-in-Service (TIS)?*

Failure of the pressure dome is only unsafe during airplane operation. However, this unsafe condition is not a result of the number of times the airplane is operated. The chance of this situation occurring is the same for an airplane with 10 hours TIS as it would be for as airplane with 500 hours TIS. For this reason, FAA has determined that a compliance based on calendar time will be utilized in this AD in order to assure that the unsafe condition is addressed on all airplanes in a reasonable time period.

## **Regulatory Impact**

### *Does This AD Impact Various Entities?*

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

### *Does This AD Involve a Significant Rule or Regulatory Action?*

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. FAA amends § 39.13 by adding a new AD to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

## **2003-11-17 Pilatus Aircraft Company Ltd.: Amendment 39-13176; Docket No. 2002-CE-53-AD.**

(a) *What airplanes are affected by this AD?* This AD affects Models PC-12 and PC-12/45 airplanes, that are certificated in any category, with the following serial numbers: 101 through 380, 382 through 385, 387 through 395, 398 through 406, 408, 409, 413, 415, and 417.

(b) *Who must comply with this AD?* Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) *What problem does this AD address?* The actions specified by this AD are intended to detect and correct damage and cracks to the pressure dome, which could lead to rapid decompression.

(d) *What actions must I accomplish to address this problem?* To address this problem, you must accomplish the following:

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
(1) Inspect the pressure dome for nick/scratch damage.	Within the next 90 days after July 28, 2003 (the effective date of this AD), unless already accomplished.	In accordance with Pilatus Aircraft Ltd. PC-12 Service Bulletin No. 53-003, Revision 1, dated July 26, 2002, and the applicable maintenance manual.
(2) If during the inspection required by paragraph (d)(1) of this AD, type "A" or "B" nick/scratch damage (as specified in the service information) is found, accomplish repairs.	Prior to further flight after the inspection in which the type "A" or "B" nick/scratch damage is found.	In accordance with Pilatus Aircraft Ltd. PC-12 Service Bulletin No. 53-003, Revision 1, dated July 26, 2002, and the applicable maintenance manual.

<p>(3) If any nick or scratch is found that is more than 0.008 inches (0.2 millimeter) during the inspection required in paragraph (d)(1) of this AD, then you have type “C” damage and you must:</p> <p>(i) Use a 10X magnified visual inspection to inspect for cracks.</p> <p>(ii) You may fly the airplane pressurized with type “C” damage for 90 days or 600 takeoff/landings after the type “C” damage is found, whichever occurs first.</p> <p>(iii) After the 90 days or 600 takeoff/landings (whichever occurs first), to fly pressurized, you must do one of the following:</p> <p>(A) Incorporate an FAA-approved repair scheme obtained from the manufacturer; or</p> <p>(B) Fly the airplane “unpressurized only” and continue to inspect for cracks every 10 hours TIS.</p> <p>(iv) If any crack is found during an inspection required by paragraph (d)(3), the airplane may not be utilized until an FAA-approved repair scheme (obtained from the manufacturer) is incorporated.</p>	<p>Inspect for cracks prior to further flight and every 10 hours TIS thereafter. Obtain an FAA approval before further flight, if cracks are found. An FAA approval is required to fly pressurized beyond 90 days or 600 landings/takeoffs, whichever occurs first, from the date of the type “C” damage finding.</p>	<p>In accordance with Pilatus Aircraft Ltd. PC-12 Service Bulletin No. 53-003, Revision 1, dated July 26, 2002, and the applicable maintenance manual.</p>
--	---	--

**Note 1:** As earlier specified in this AD, flight is not permitted if crack damage is found.

**Note 2:** As earlier specified in this AD, FAA approval is required to fly pressurized beyond 90 days or 600 takeoffs/landings, whichever occurs first, from date of repair for type "C" damage.

(e) *Can I comply with this AD in any other way?* You may use an alternative method of compliance or adjust the compliance time if:

- (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Standards Office Manager, Small Airplane Directorate, approves your alternative.

Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Standards Office Manager.

**Note 3:** This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) *Where can I get information about any already-approved alternative methods of compliance?* Contact Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; facsimile: (816) 329-4090.

(g) *What if I need to fly the airplane to another location to comply with this AD?* The FAA can issue a special flight permit under §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) *Are any service bulletins incorporated into this AD by reference?* Actions required by this AD must be done in accordance with Pilatus Aircraft Ltd. PC-12 Service Bulletin No. 53-003, Revision 1, dated July 26, 2002. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You may get copies from Pilatus Aircraft Ltd., Customer Liaison Manager, CH-6371 Stans, Switzerland; telephone: +41 41 619 63 19; facsimile: +41 41 619 6224; or from Pilatus Business Aircraft Ltd., Product Support Department, 11755 Airport Way, Broomfield, Colorado 80021; telephone: (303) 465-9099; facsimile: (303) 465-6040. You may view copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

**Note 4:** The subject of this AD is addressed in Swiss AD Number HB 2002-608, dated November 1, 2002.

(i) *When does this amendment become effective?* This amendment becomes effective on July 28, 2003.

Issued in Kansas City, Missouri, on May 27, 2003.  
David R. Showers,  
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. 03-13793 Filed 6-5-03; 8:45 am]  
BILLING CODE 4910-13-P